

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: January 7, 2002, 15:49:09 ; Search time 101.88 Seconds

(without alignments)  
34.394 Million cell updates/sec

Title: US-08-569-749-8

Perfect score: 267

Sequence: 1 LAKAGFYIIGPDVACFACGKLSNMEPKDNAMSEHLRHPKCPF 46

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 219241 seqs, 76174552 residues

Total number of hits satisfying chosen parameters: 219241

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database :

1: p1r1:\*  
2: p1r2:\*  
3: p1r3:\*  
4: p1r4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	264	98.9	604	2	S68449 apoptos is inhibito
2	254	95.1	358	2	JC5964 apoptos is inhibito
3	248	92.9	618	2	S68450 apoptos is inhibito
4	182	68.2	497	2	S68454 apoptos is inhibito
5	145	54.3	496	2	S68452 apoptos is inhibito
6	145	54.3	487	2	S69455 apoptos is inhibito
7	141	52.6	1232	2	A55478 neuronal apoptos is
8	138	51.7	1447	2	T42628 inhibitor of apopt
9	135	50.6	268	2	T10304 apoptos is inhibito
10	135	50.6	268	2	A53989 inhibitor-of-apopt
11	131	49.1	275	2	A45679 BIR repeat contain
12	122.5	45.9	4845	2	JC71067 kidney inhibitor o
13	121	45.3	298	3	JC7568 Cull7 protein - fl
14	112	41.9	208	2	T03183 probable apoptos
15	103	38.6	997	2	T43523 ORF MSV248 probabl
16	100	37.5	150	2	T84609 apoptos is inhibito
17	98	36.7	155	2	T30489 IAP1 orf17 - Bomby
18	95	35.6	292	2	T41772 orf13 protein - Au
19	93	34.8	286	2	D36828 apoptos is inhibito
20	90	33.7	275	2	T10310 ORF MSV242 probabl
21	74.5	27.9	329	2	T28403 ORF MSV242 probabl
22	62.5	25.5	155	2	T37471 apoptos is inhibito
23	62.5	25.5	223	2	S16652 apoptos is inhibito
24	60	22.5	249	2	H72658 apoptos is inhibito
25	60	22.5	249	2	T41814 IAP2 orf11 - Bomby
26	59	22.1	355	2	C64549 conserved hypochet
27	59	22.1	355	2	G71958 hypothetical prote
28	58	21.7	234	2	T30427 probable apoptos
29	57.5	21.5	278	1	S25630 hupf protein - Rho

30	56.5	21.2	724	2	C49423 semaphorin II prec
31	56.5	21.2	2236	1	OZPF rudimentary protei
32	56	21.0	1004	2	JH0470 Na+/K+-exchanging
33	55	20.6	313	2	T02534 hypothetical prote
34	55	20.6	462	2	T47287 hypothetical prote
35	55	20.6	469	2	T47015 hypothetical prote
36	55	20.6	1433	2	S54587 C18 protein - yea
37	54.5	20.4	346	2	A81807 fumarate hydratase
38	54	20.2	181	2	E36794 WDRI protein - hum
39	54	20.2	606	2	T13152 complement C7 prec
40	54	20.2	843	1	A27340 env polypeptid -
41	53.5	20.0	172	2	T34035 zinc finger, C3HC4
42	53.5	20.0	563	1	VCWVW7 ring-infected eryt
43	53.5	20.0	741	2	T40095 ATP-dependent heli
44	53	19.9	838	2	A48440
45	53	19.9	1309	2	F82207

## ALIGNMENTS

RESULT 1  
S68449 apoptos is inhibitor hiap-1 - human  
C:Species: Homo sapiens (man)  
C:Date: 17-Jul-1998 #sequence\_revision 17-Jul-1998 #text\_change 21-Jul-2000  
C:Accession: S68449  
R:Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Faraha  
Nature 379, 349-353, 1996  
A:Title: Suppression of apoptosis in mammalian cells by NAIP and a related family of  
A:Reference number: A58182; MUID:96149249  
A:Accession: S68449  
A:Status: nucleic acid sequence not shown  
A:Molecule type: mRNA  
A:Residues: 1-604 <LIS>  
A:Cross-References: EMBL:U45878; NID:q1184315; PIDD:AA050371.1; P1D:g1184316  
C:Function:  
A:Description: apoptotic suppressor  
C:Superfamily: RING finger homology  
C:Keywords: apoptosis; zinc finger  
F:553-597/Domain: RING finger homology <RNG>

Query Match 98.9%; Score 264; DB 2; Length 604;  
Best local Similarity 97.8%; Pred. No. 8.3e-25;  
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 LAKAGFYIIGPDVACFACGKLSNMEPKDNAMSEHLRHPKCPF 46  
DB 189 LAKAGFYIIGPDVACFACGKLSNMEPKDNAMSEHLRHPKCPF 234

RESULT 2  
JC5964 apoptos is inhibitor - pig  
C:Species: Sus scrofa domestica (domestic pig)  
C:Date: 04-Sep-1998 #sequence\_revision 04-Sep-1998 #text\_change 02-Sep-2000  
C:Accession: JC5964  
R:Stehlik, C.; de Martin, R.; Binder, B.R.; Lipp, J.  
Biochem. Biophys. Res. Commun. 243, 827-832, 1998  
A:Title: Cytokine induced expression of porcine inhibitor of apoptosis protein (Iap)  
A:Reference number: JC5964; MUID:98162622  
A:Accession: JC5964  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-358 <STP>  
A:Cross-References: DB:U79142; NID:g2957174; PIDD:AA039171.1; P1D:g2957175  
C:Superfamily: RING finger homology  
F:307-351/Domain: RING finger homology <RRN>

Query Match 95.1%; Score 254; DB 2; Length 358;  
Best local Similarity 93.5%; Pred. No. 8.7e-24;

Matches 43: Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46  
 |||||  
 DB 24 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 69

RESULT 3  
 S68450  
 Apoptosis inhibitor hlap-2 - human  
 C:Species: Homo sapiens (man)  
 C>Date: 17-Jul-1998 #sequence\_revision 17-Jul-1998 #text\_change 21-Jul-2000  
 C:Accession: S68450  
 R:Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Farahani, M.  
 A>Title: Suppression of apoptosis in mammalian cells by NAIP and a related family of IAP  
 A:Reference number: A58182; MUID:96149249  
 A:Accession: S68450  
 A>Status: nucleic acid sequence not shown  
 A:Molecule type: mRNA  
 A:Residues: 1-618 <LIS>  
 A:Cross-references: EMBL:U45879; NID:91184313; PION:AAC50372.1; PID:91184318  
 A:Function:  
 C:Superfamily: Apoptosis inhibitor IAP homolog; RING finger homology  
 C:Keywords: apoptosis; zinc finger  
 F:567-611/Domain: RING finger homology <RNG>

Query Match  
 Best Local Similarity 92.9%; Score 248; DB 2; Length 618;  
 Matches 42; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

OY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46  
 |||||  
 DB 204 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 249

RESULT 4  
 S69544  
 Apoptosis inhibitor IAP homolog - human  
 C:Species: Homo sapiens (man)  
 C>Date: 06-Dec-1996 #sequence\_revision 13-Mar-1997 #text\_change 17-Nov-2000  
 C:Accession: S69544; S68451  
 R:Druckett, C.S.; Nava, V.E.; Gedlich, R.W.; Clem, R.J.; van Dongen, J.L.; Giffillan, M.C.  
 EMBL J. 15, 2685-2694, 1996  
 A>Title: A conserved family of cellular genes related to the baculovirus iap gene and er  
 A:Reference number: S69544; MUID:96256286  
 A:Accession: S69544  
 A>Status: preliminary; nucleic acid sequence not shown  
 A:Molecule type: mRNA  
 A:Residues: 1-497 <DDC>  
 A:Cross-references: EMBL:U32974; NID:91016687; PION:AAC50518.1; PID:91016688  
 R:Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Farahani, M.  
 A>Title: Suppression of apoptosis in mammalian cells by NAIP and a related family of IAP  
 A:Reference number: A58182; MUID:96149249  
 A:Accession: S68451  
 A>Status: nucleic acid sequence not shown  
 A:Molecule type: mRNA  
 A:Residues: 1-161, C, 163-422, O, 424-497 <LIS>  
 A:Cross-references: EMBL:U45880; NID:91184319; PION:AAC50373.1; PID:91184320  
 C:Genetics:  
 A:Gene: i1p  
 C:Function:  
 A:Description: Apoptotic suppressor  
 C:Superfamily: Apoptosis inhibitor IAP homolog; RING finger homology  
 C:Keywords: apoptosis; zinc finger  
 F:446-490/Domain: RING finger homology <RNG>

Query Match  
 Best Local Similarity 68.2%; Score 182; DB 2; Length 497;  
 Matches 69; Conservative 8; Mismatches 15; Indels 0;

Matches 32: Conservative 1; Mismatches 13; Indels 0; Gaps 0;

OY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 46  
 |||||  
 DB 184 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 229

RESULT 5  
 S68452  
 Apoptosis inhibitor diap - fruit fly (Drosophila melanogaster)  
 C:Species: Drosophila melanogaster  
 C>Date: 17-Jul-1998 #sequence\_revision 17-Jul-1998 #text\_change 17-Nov-2000  
 C:Accession: S68452; S78528  
 R:Liston, P.; Roy, N.; Tamai, K.; Lefebvre, C.; Baird, S.; Cherton-Horvat, G.; Farahani, M.  
 A>Title: Suppression of apoptosis in mammalian cells by NAIP and a related family of  
 A:Reference number: A58182; MUID:96149249  
 A:Accession: S68452  
 A>Status: nucleic acid sequence not shown  
 A:Molecule type: mRNA  
 A:Residues: 1-496 <LIS>  
 A:Cross-references: EMBL:U45881; NID:91184313; PION:AAC46988.1; PID:91184314  
 R:Baird, S.D.  
 Submitted to the EMBL Data Library, January 1996  
 A:Reference number: S78528  
 A:Accession: S78528  
 A:Molecule type: mRNA  
 A:Residues: 1-36, AT, 37, K, 39, L, 41-44, H, 46-58, O, 60-412, A, 414-427, A, 429-49  
 A:Cross-references: EMBL:U45881; NID:91184313; PION:AAC46988.1; PID:91184314  
 C:Genetics:  
 A:Cross-references: Flybase:FBgn0015247  
 C:Function:  
 A:Description: Apoptotic suppressor  
 C:Superfamily: Apoptosis inhibitor IAP homolog; RING finger homology  
 C:Keywords: apoptosis; zinc finger  
 F:445-489/Domain: RING finger homology <RNG>

Query Match  
 Best Local Similarity 54.3%; Score 145; DB 2; Length 496;  
 Matches 25; Conservative 4; Mismatches 16; Indels 0; Gaps 0;

OY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 45  
 |||||  
 DB 131 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 175

RESULT 6  
 S69545  
 Apoptosis inhibitor IAP homolog - fruit fly (Drosophila melanogaster)  
 C:Species: Drosophila melanogaster  
 C>Date: 06-Dec-1996 #sequence\_revision 13-Mar-1997 #text\_change 21-Jan-2000  
 C:Accession: S69545  
 R:Druckett, C.S.; Nava, V.E.; Gedlich, R.W.; Clem, R.J.; van Dongen, J.L.; Giffillan, M.C.  
 EMBL J. 15, 2685-2694, 1996  
 A>Title: A conserved family of cellular genes related to the baculovirus iap gene and  
 A:Reference number: S69544; MUID:96256286  
 A:Accession: S69545  
 A>Status: preliminary; nucleic acid sequence not shown  
 A:Molecule type: mRNA  
 A:Residues: 1-497 <DDC>  
 A:Cross-references: EMBL:U32373; NID:91019116; PION:AAC47155.1; PID:91019117  
 C:Genetics:  
 A:Gene: i1p  
 C:Superfamily: Apoptosis inhibitor IAP homolog; RING finger homology  
 C:Keywords: apoptosis; zinc finger  
 F:446-490/Domain: RING finger homology <RNG>

Query Match  
 Best Local Similarity 54.3%; Score 145; DB 2; Length 497;  
 Matches 25; Conservative 4; Mismatches 16; Indels 0; Gaps 0;

OY 1 LAKAGFYIIGPDRVACFACGKLSNMEPKDNAMSEHLRHPKCP 45

Db 133 LAKAGFYIQLNDHVKWCNCGVIAKKEKNDNAFEHRKFPQCP 177

RESULT 7  
A:Accession: A53478  
A:Title: The gene for neuronal apoptosis inhibitory protein is partially deleted in indi  
Cell 80, 167-178, 1995  
A:Reference number: A53478; MUID:95112344  
A:Molecule type: mRNA  
A:Residues: 1-1232 <ROY>  
A:Cross-references: GB:019251  
A:Gene: GDB:SMA6; SMA  
A:Cross-references: GDB:120378; OMIM:600354; OMIM:253300  
A:Map position: 5q12.2-5q13  
C:Keywords: apoptosis; ATP; glycoprotein; nucleotide binding; P-loop; transmembrane prot  
E:94-110/Domain: transmembrane #status predicted <TM1>  
E:470-477/Region: nucleotide-binding motif A (P-loop)  
E:479-496/Domain: transmembrane #status predicted <TM2>  
F:476/Binding site: ATP (Lys) #status predicted  
F:618,632,823,923,1035/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 52.8%; Score 141; DB 2; Length 1232;  
Best Local Similarity 52.2%; Pred. No. 2.3e-09;  
Matches 24; Conservative 6; Mismatches 16; Indels 0; Gaps 0;

Db 299 LAKAGFYIQLNDHVKWCNCGVIAKKEKNDNAFEHRKFPQCP 344

RESULT 8  
A:Accession: T42628  
A:Title: neuronal apoptosis inhibitory protein 2 - mouse  
C:Species: Mus musculus (house mouse)  
C>Date: 11-Jan-2000 #sequence\_revision 11-Jan-2000 #text\_change 11-Jan-2000  
A:Accession: T42628  
R:Yaraghi, Z.; Dice, E.; Gros, P.; Mackenzie, A.  
Mamm. Genome 10, 761-763, 1999  
A:Title: CDNA cloning and the 5' genomic organization of Naip2, a candidate gene for mur  
A:Reference number: 222179; MUID:99315342  
A:Accession: T42628  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-1447 <YAR>  
A:Cross-references: EMBL:AF102871; NID:g3860228; PID:g3860229; PIDN:AACT3002.1  
C:Gene: Naip2

Query Match 51.7%; Score 138; DB 2; Length 1447;  
Best Local Similarity 52.2%; Pred. No. 6.3e-09;  
Matches 24; Conservative 5; Mismatches 17; Indels 0; Gaps 0;

Db 181 LSAAGFVFTGKRDVQCFSCGCGUWNEEDDPWKEHAWPKCF 226

RESULT 9  
A:Accession: T10304  
A:Title: Inhibitor of apoptosis protein 3 - Orgyia pseudotsugata nuclear polyhedrosis virus  
C:Species: Orgyia pseudotsugata nuclear polyhedrosis virus, Opmpv

C>Date: 16-Jul-1999 #sequence\_revision 16-Jul-1999 #text\_change 15-Sep-2000  
C:Accession: T10304  
R:Ahrens, C.A.; Russell, R.R.; Funk, C.J.; Evans, J.; Haywood, S.; Rohmann, G.F.  
Virology 229, 381-389, 1997  
A:Title: The sequence of the Orgyia pseudotsugata multineucleocapsid nuclear polyhedro  
A:Reference number: 217011; MUID:97271300  
A:Accession: T10304  
A:Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: DNA  
A:Residues: 1-268 <NHR>  
A:Cross-references: EMBL:U75930; NID:g2934903; PIDN:AA59034.1; PID:g1911281  
C:Superfamily: viral apoptosis inhibitor IAP; RING finger homology  
F:217-261/Domain: RING finger homology <RRN>

Query Match 50.6%; Score 135; DB 2; Length 268;  
Best Local Similarity 45.7%; Pred. No. 3e-09;  
Matches 21; Conservative 8; Mismatches 17; Indels 0; Gaps 0;

Db 132 LAEAGFYTGSGDKTRCFCCDGLKDWEPDAPWQAHAWYDRCEY 177

RESULT 10  
A:Accession: A53989  
A:Title: Apoptosis-inhibiting protein - Orgyia pseudotsugata multineucleocapsid nuclear polyhedrosis  
C:Species: Orgyia pseudotsugata multineucleocapsid nuclear polyhedrosis virus, Opmpv  
C>Date: 15-Oct-1994 #sequence\_revision 15-Oct-1994 #text\_change 15-Sep-2000  
C:Accession: A53989  
R:Biernbaum, M.J.; Clem, R.J.; Miller, L.K.  
J. Virol. 68, 2521-2528, 1994  
A:Title: An apoptosis-inhibiting gene from a nuclear polyhedrosis virus encoding a po  
A:Reference number: A53989; MUID:94187094  
A:Accession: A53989  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-268 <BIR>  
A:Cross-references: GB:L22564; NID:g456111; PIDN:AA802610.1; PID:g456114  
A:Note: authors translated the codon TGG for residue 28 as Tyr, GAC for residue 50 as  
C:Superfamily: viral apoptosis inhibitor IAP; RING finger homology  
F:217-261/Domain: RING finger homology <RRN>

Query Match 50.6%; Score 135; DB 2; Length 268;  
Best Local Similarity 45.7%; Pred. No. 3e-09;  
Matches 21; Conservative 8; Mismatches 17; Indels 0; Gaps 0;

Db 132 LAEAGFYTGSGDKTRCFCCDGLKDWEPDAPWQAHAWYDRCEY 177

RESULT 11  
A:Accession: A45679  
A:Title: Inhibitor-of-apoptosis polypeptide (IAP) - Cydia pomonella granulosis virus Cpvy  
C:Species: Cydia pomonella granulosis virus Cpvy  
C>Date: 21-Sep-1993 #sequence\_revision 25-Apr-1997 #text\_change 15-Sep-2000  
C:Accession: A45679  
R:Crook, N.E.; Clem, R.J.; Miller, L.K.  
J. Virol. 67, 2168-2174, 1993  
A:Title: An apoptosis-inhibiting baculovirus gene with a zinc finger-like motif.  
A:Reference number: A45679; MUID:93188168  
A:Accession: A45679  
A:Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-275 <CHD>  
A:Cross-references: GB:U05494; NID:g289583; PIDN:AAA43835.1; PID:g289584  
A:Note: sequence extracted from NCBI backbone (NCBIT:127014, NCBIT:127015)  
C:Superfamily: viral apoptosis inhibitor IAP; RING finger homology

Query Match 49.1%; Score 131; DB 2; Length 275;



Tue Jan 8 08:23:52 2002

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